RECENT CHANGES TO THE BURMESE MAMMAL LIST[1]

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The paper gives taxonomic revisions and additions to the list of Burmese mammals since the publication of the checklist by Ellerman and Morrison-Scott (1951).

Introduction

No complete list restricted solely to the mammal fauna of Burma has been published since that of Blyth (1875). The most recent list, by Ellerman & Morrison-Scott (1951) includes the mammals of the Palaearctic and the Indian subcontinent. Since 1951 there has been extremely little work on mammal collection or surveying within Burma, but numerous taxonomic changes based on material from neighbouring countries and on the older Burmese museum material are relevant to the local fauna. These changes and the few recent additions of species are compiled here for easy reference.

Insectivora : Soricidae

The confusing history of the Pegu type specimens of the Southeast Asian White-toothed Shrew *Crocidura fuliginosa* has been described by Medway (1977). The currently accepted nomenclature of the Burmese or near-Burmese representatives of the genus is as follows :

Crocidura horsfieldi indochinensis Robinson & Kloss 1922

North Burma and the Shan States.

C. attenuata subsp. indet.

North and central Burma. Geographically it is closest to *C. a. rubricosa* Anderson 1877 from Assam and the Himalayas (Jenkins 1976), which may in fact extend into northernmost parts of Burma.

C. vorax Allen 1923

Not yet found in Burma, but the eastern Shan States are interposed between its known localities in Yunnan and at Doi Inthanon in north Thailand. This taxon is most likely to prove a subspecies of *C. russula* or *C. attenuata*, but its affinities cannot properly be decided on present evidence (P. D. Jenkins, pers. comm.).

C. fuliginosa fuliginosa (Blyth 1855)

North and central Burma south at least to Schwe Gyin in Pegu, and doubtless through Tenasserim.

C. fuliginosa dracula Thomas 1912

Northeast Burma.

Primates : Cercopithecidae

Presbytis femoralis robinsoni Thomas 1910

Extreme south of Tenasserim around Maliwun. Should the Burmese specimens prove distinct from those of Peninsular Thailand, the name *keatii* Robinson & Kloss 1911 is available. I follow Wilson & Wilson (1975) in equating continental Asian banded leaf-monkeys with east Sumatran *femoralis* rather than west Sumatran *melalophos* ; previously the two were not distinguished.

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Rodentia ; Sciuridae

The representatives of *Petinomys* are now known as :

Petinomys vordermanni phipsoni (Thomas 1916)

Tenasserim ; listed as a subspecies of *P. setosus* by Ellerman (1961), and apparently confused with that species by Lekagul & McNeely (1977).

P. setosus morrisi (Carter 1942)

Taro, in northern Burma ; this geographical isolate may possibly be a full species.

Hystricidae

Porcupines from Tenasserim have been listed under the name *H. hodgsoni*, the eastern Palaearctic species. On geographical grounds they are more likely to prove representative of the Sundaland *H. brachyura*. Their name would then become *H. brachyura subcristata* Swinhoe 1870. However, it is also possible that *H. hodgsoni yunnanensis* Anderson 1878 just crosses the Burma-Yunnan border.

Muridae

Taxonomy of the genera *Rattus* and *Mus* has been the subject of so much recent revision that the changes must be interpreted in the context of all sympatric forms. Their representatives are therefore listed in full below.

Rattus sikkimensis macmillani Hinton 1919

Hkamti, in western Upper Chindwin.

R. sikkimensis khyensis Hinton 1919

Chin Hills, Mount Popa, Maymyo and Hsipaw ; Marshall (in Lekagul & McNeely 1977) uses the name *R koratensis* Kloss 1919 for this species, on the grounds that the type specimen is inadequately labelled, but Hinton's description was published seven months before that by Kloss.

R. rattus (Linnaeus 1758)

A subspecies of *R rattus*, possibly *R. r. diardii* (Jentinck 1880), is found in Burmese cities. Rural Tenasserim rats from the mainland and islands may be referable to another species, *R. tiomanicus* (=*R. jalorensis*). Karyological distinctions between these two are clear in the south of the Malay Peninsula (Medway & Lim 1966, Yong 1969), but individual variants seem to bridge these differences in Thailand. Even so, the island subspecies are more closely related to one another than to urban *R. rattus*, and even in Thailand the urban and rural populations remain distinct with little hybridization.

R. tiomanicus robustulus (Blyth 1859)

Schwe Gyin, north Tenasserim.

R. tiomanicus tikos Hinton 1919

Tenasserim, and Malcolm, King and Sullivan Islands.

R. tiomanicus dentatus (Miller 1913)

Hastings Island.

R. tiomanicus insulanus (Miller 1913)

Helfer Island.

R. tiomanicus exsul (Miller 1913)

James Island.

R. tiomanicus fortunatus (Miller 1913)

Chance Island.

R. nitidus obsoletus Hinton 1919

Chin Hills.

R. exulans concolor (Blyth 1859)

From Bhamo in central Burma to Tenasserim.

R. norvegicus (Berkenhout 1769)

In towns, commensal with man.

R. muelleri validus (Miller 1900)

Tenasserim.

R. mackenziei mackenziei (Thomas 1916)

Chin Hills, and probably central Burma, the Shan States and north Tenasserim. Apparent sympatry with *R. bowersi* in Thailand supports its recognition at species level (Lekagul & McNeely 1977).

R. bowersi bowersi (Anderson 1879)
North Burma.

R. bowersi feae (Thomas 1916)
Muleyit.

R. manipulus manipulus (Thomas 1916)
Kindat and Kabaw valley in the Chin Hills.

R. berdmorei berdmorei (Blyth 1851)
Mergui in Tenasserim.

R. berdmorei mullulus (Thomas 1916)
Muleyit.

R. coxingi andersoni (Thomas 1911)
North Burma.

R. confucianus (Milne-Edwards 1871)

R. bukit (Bonhote 1903)

R. rapit (Bonhote 1903)

Various interbreeding fulvous and greyish rat populations in Burma and north Thailand have formerly been split between the taxa *R. niviventer* and *R. fulvescens*, names referable to damaged Nepalese material. Chasen (1940) and Marshall (in Lekagul & McNeely 1977) were forced to avoid the use of these names for lack of evidence on the affinities of the types. These authors divide the relevant populations between the three species *confucianus*, *bukit* and *rapit*, of which at least two and possibly three are represented in Burma. For their local populations Ellerman (1961) used the names *R. niviventer niviventer* (Hodgson 1836) (north Burma), *R. n. mentosus* Thomas 1916 (Upper Chindwin), and *R. fulvescens fulvescens* (Gray 1847) (Shan States to Tenasserim). At present it is impossible to assign the Burmese populations with certainty even between the three more recently recognized species, but it is thought that *R. confucianus* may be found in north Burma and the Shan States, *R. bukit* throughout eastern Burma and Tenasserim.

R. brahma (Thomas 1914)

Adung Valley in northernmost Burma. This species also lives in Assam and has been distinguished by Musser (1970) as a full species.

R. eha ninus Thomas 1922

Adung Valley and Imaw Bum, northernmost Burma.

R. cremoriventer (Miller 1900)

The following two (or three) subspecies are continental Asian members of the *cremoriventer* group with large auditory bullae. Musser (1973) treats these as distinct from Sundaland *cremoriventer* under the name *R. langbianis* with subspecies ranging from Assam to Vietnam. A compromise treatment would unite these northern Asian members within the wider ranging subspecies, *R. c. langbianis* :

R. cremoriventer indosinicus Osgood 1932
Kindat, Chin Hills.

R. cremoriventer tenaster (Thomas 1916)
Muleyit.

R. (?) cremoriventer blythi Kloss 1917

Schwe Gyin in north Tenasserim. The affinities of this taxon are uncertain, but this may prove to be a member of the southern *cremoriventer* group and the other members of the northern *langbianis* group.

R. surifer surifer (Miller 1900)

Mainland Tenasserim. Medway (1978) includes south Burma in the range of the sibling species *R. rajah* (Thomas 1894), but specimens are only known north to Trang in Peninsular Thailand (Lekagul & McNeely 1977).

R. surifer luteolus (Miller 1903)
St. Matthew Island.

R. surifer bentincanus (Miller 1903)
Bentinck Island.

R. surifer umbridorsum (Miller 1903)
Loughborough Island.

R. surifer casensis (Miller 1903)
Chance Island.

R. surifer domelicus (Miller 1903)
Domel Island. All the above five island populations are short-tailed.

R. edwardsi edwardsi (Thomas 1882)
North Burma.

R. sabanus vociferans (Miller 1900)
Tenasserim north to Mergui town.

R. sabanus matthaeus (Miller 1903)
St. Matthew Island.

R. sabanus stridulus (Miller 1903)
Bentinck Island.

R. sabanus lucas (Miller 1903)
St. Luke Island.

R. sabanus gilbiventer (Miller 1903)
Sullivan Island.

R. sabanus stentor (Miller 1913)
James Island.

R. sabanus insularum (Miller 1913)
Domel Island.

R. sabanus charae (Miller 1913)
Clara Island. The above seven island populations are referred to *sabanus* purely on grounds of external morphology.

R. kathleenae (Thomas 1914)
Pagan and Mount Popa.

Mus musculus tytleri Blyth 1859
Commensal with man in Maymyo, Pagan, Rangoon and other towns.

M. booduga lepidoides (Fry 1931)
Mount Popa.

M. cookii cookii Ryley 1914
Central and west Burma to the Indian border.

M. cervicolor popaeus (Thomas 1919)
Maymyo, Pegu and Chindwin, Mount Popa and Bhamo. By implication Marshall (in Lekagul & McNeely 1977) regards all Burmese *cervicolor* as a single taxon, and suppresses the earlier name *nitidulus* Blyth 1859 of which the identity is dubious. Ellerman (1961) grouped *cookii* and *popaeus* in the Indian *M. famulus* Bonhote 1898.

M. shortridgei (Thomas 1914)
Central Burma from Mandalay to Mount Popa and Pagan.

M. pahari pahari Thomas 1916
North Burma.

M. pahari jacksoniae (Thomas 1921)
Upper Irrawaddy drainage.

Perissodactyla : Rhinocerotidae

The record of *Rhinoceros unicornis* Linnaeus 1766 at Bumpha Bum in Myitkyina District in 1962 (Yin 1967) gives Burma the distinction of more rhinoceros species than any other country.

Artiodactyla : Bovidae

The most recent mammal species to be described from Burma, *Naemorhedus cranbrooki* Hayman 1961, is found in the mountains of northernmost Burma at higher altitudes than the common goral.

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